



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

March 17, 2017

Gregory Carli
GHD
Niagara Falls Blvd., Suite #3
Niagara Falls, New York 14304

RE: Comments and Approval for 2016 Long-Term Monitoring Plan Annual Report
Former Rockwell International Corporation Site, Allegan, Michigan

Dear Mr. Carli:

I have received the report dated January 27, 2017, containing the results of the 2016 groundwater monitoring. U.S. EPA, in consultation with the Michigan Department of Environmental Quality (MDEQ), presents the following comments:

1. Field data sheets for water level and LNAPL measurements, low-flow sampling and field parameter measurements; logbook entries; and photographic documentation are not included with this document. These industry-standard data be provided to EPA and MDEQ, and included in subsequent reports.
2. A summary table for detected analytes as related to Table 3, "Selected Analytical Groups" would be useful in presenting understanding the types of compounds detected. Further, such a summary table should be designed to include each subsequent sampling event's data to aid in comparison and evaluation. Data is presented in Table 4 by sample location instead of analyte grouping.
3. A brief discussion of the results of data validation and quality control sampling should be provided in the report body.
4. The report describes four monitoring wells (MW-7, MW-137, MW-146S and MW-600) as having "plant roots" infiltrating the well screen and GHD describes the actions taken to remove these roots from the wells. GHD should provide photographic record of the roots observed in these wells and further investigate the possibility that these well screens have been compromised by root infiltration.
5. Section 3.2 indicates groundwater contour maps were generated for the Water Table and Sand & Gravel aquifers, but not for the Deep Water Bearing Zone (also referred to as Lower Aquifer or "LA" in Table 2 notes) because selected sample locations for the LTMP do not include monitoring wells screened in the Deep Water Bearing Zone.

Table 2 indicates water level elevation data is available for this zone. The contours for this zone should be included to more thoroughly depict the groundwater model for the site.

6. The report narrative lacks detail regarding detected compounds. For example, section 3.3.1 indicates, "VOCs were detected in 6 of the 26 wells sampled...". Further review of Table 4 indicates TCE was detected at a concentration of 1.7 micrograms per liter ($\mu\text{g/L}$), chlorobenzene was detected at a concentration of 1.1 $\mu\text{g/L}$ in MW-500, and cis 1,2-dichlorobenzene, PCE and TCE were detected in at MW-631S. Future reports should increase the level of detail to aid in understanding the magnitude of detected compounds.
7. If GHD chooses to provide comparisons to data obtained under the Revised Interim Groundwater Monitoring Plan (RIMP), compound-specific data should be provided in tabular form and presented in LTMP documentation. Several comparisons of October 2016 groundwater data and data collected during 2012/2013 RIMP activities are present throughout this document. For example, "The detections of VOCs in the above wells are generally consistent with the detections of VOCs from the four quarters of groundwater sampling conducted in 2012/2013...".
8. In several instances, GHD provides conclusions regarding (1) water-bearing units and their potential hydraulic connections and (2) contaminants and their potential to impact the Kalamazoo River. Previous sampling data should be included in the report or conclusions should be provided later using a more complete data set and based on a thorough evaluation of site contaminants and the groundwater model.

U.S. EPA requires the comments above be addressed during the next sampling event or in the next sampling report. With the exception of submitting the data sheets noted in comment 1, U.S. EPA approves the 2016 Long-Term Monitoring Plan Annual sampling results and report submittal.

If you have any questions, please do not hesitate to contact me at (312) 886-0272 and sleboda.jena@epa.gov.

Sincerely,



Jena Sleboda Braun
Remedial Project Manager

cc: K. Schnieders, C-14J
Linda Furlough, Meritor
Priyank Patel, MDEQ